AMENDMENTS TO THE CLAIMS:

This listing of claims replaces all prior versions and listings of claims in the application.

Listing of claims:

Claims 1 and 2 (Cancelled).

Claim 3 (Currently amended): An electrophoretic apparatus comprising:

an electrophoretic member in which a disk-shaped member thereof has one or a plurality of passages formed therein and also such holes reaching the passage that [[is]] are formed at positions corresponding to both ends of the passage on one surface of the disk-shaped member;

a voltage applying part for applying a voltage across the passage of the electrophoretic member,

an electrophoretic-member holding part for holding the electrophoretic member on the surface thereof,

a temperature regulation mechanism, which is provided on the back surface of the electrophoretic-member holding part, for regulating the temperature of the electrophoretic member,

an electrophoretic chamber lid for covering the surface of the electrophoretic member held on the electrophoretic-member holding part, the electrophoretic chamber lid having an opening; and

a detecting part for detecting a specimen present in the passage of the electrophoretic member, the detecting part being placed above the electrophoretic chamber lid,

wherein the detecting part consists of a fluorescent-light detecting device for detecting a fluorescent light in a detection range, the fluorescent-light detecting device comprising:

a first optical system for focusing, for image formation, a light from the detecting range through the opening of the electrophoretic chamber lid into a slit hole; and

a second optical system provided with a reflection-type diffraction grating, for separating a light from the slit hole and focusing the light, for image formation, onto a detecting element.

Claim 4 (Original): The electrophoretic apparatus according to claim 3, comprising a reflection-type concave grating as the reflection-type diffraction grating, wherein the second optical system consists of only the reflection-type concave grating.

Claim 5 (Currently amended): An ~~The~~ electrophoretic apparatus ~~according to claim 3, further~~ comprising:

an electrophoretic member in which a disk-shaped member thereof has one or a plurality of passages formed therein and also such holes reaching the passage that are formed at positions corresponding to both ends of the passage on one surface of the disk-shaped member,

a voltage applying part for applying a voltage across the passage of the electrophoretic member,

a detecting part for detecting a specimen present in the passage of the electrophoretic member; and

a specimen-injection monitor mechanism for detecting a specimen at a site where a specimen is injected into the passage, the specimen-injection monitor mechanism being installed separately from the detecting part,

wherein the detecting part consists of a fluorescent-light detecting device for detecting a fluorescent light in a detection range, the fluorescent-light detecting device comprising:

a first optical system for focusing, for image formation, a light from the detecting range into a slit hole; and

a second optical system provided with a reflection-type diffraction grating, for separating a light from the slit hole and focusing the light, for image formation, onto a detecting element,

wherein the specimen-injection monitor mechanism and the detecting mechanism are each provided with a fluorescent-light detecting optical system, which shares a common excitation light source in use.

Claim 6 (Cancelled).

Claim 7 (Original): The electrophoretic apparatus according to claim 5, wherein the specimen-injection monitor mechanism is provided with a detecting optical system having an LED as a light source thereof.

Claim 8 (Currently amended): The electrophoretic apparatus according to claim 5, wherein:

the electrophoretic member ~~is provided as the passage with~~ comprising a specimen injection passage and a separation passage which intersect with each other; and

the apparatus further comprises a control part for permitting the voltage applying part to supply a voltage for guiding a specimen to an intersection between the specimen injection passage and the separation passage, and for ~~once~~ stopping the voltage ~~electrophoretic apparatus in case that~~ upon the occurrence of a specimen distribution ~~in~~ at a predetermined range along the specimen injection passage having been detected by the specimen-injection monitor mechanism, is not ~~uniformed even~~ uniform after a predetermined time has elapsed.

Claim 9 (Currently amended): The electrophoretic apparatus according to claim 5, wherein:

the electrophoretic member ~~is provided as the passages with~~ comprising a specimen injection passage and a separation passage which intersect with each other; and

the apparatus further comprises a control part which stops voltage application to said passages upon the specimen-injection monitor mechanism detecting a specimen present at said intersection as a result of the voltage applying part failing to electrophorectically migrate the specimen into the separation passage.

~~the apparatus further comprises a control part for once stopping the electrophoretic apparatus in case that a specimen present at an intersection between the specimen injection~~

~~passage and the separation passage detected by the specimen injection monitor mechanism when an electrophoretic voltage for specimen separation is applied by the voltage applying part fails to electrophorectically migrate into the separation passage.~~

Claim 10 (Currently amended): An electrophoretic apparatus comprising:

an electrophoretic member in which a disk-shaped member thereof has one or a plurality of passages formed therein and also such holes reaching the passage that [[is]] are formed at positions corresponding to both ends of the passage on one surface of the disk-shaped member;

a voltage applying part for applying a voltage across the passage of the electrophoretic member;

a detecting part for detecting a specimen present in the passage of the electrophoretic member;

an electrophoretic-medium filling mechanism for filling an electrophoretic medium into the passages ~~and the reservoirs~~ through ~~the~~ reservoirs of the electrophoretic member and a specimen injection mechanism for injecting a specimen into one of the reservoirs,

an electrophoretic-medium sucking mechanism for removing an electrophoretic medium contained in the reservoirs;

a buffer-liquid injecting mechanism for injecting a buffer liquid into the reservoirs simultaneously after the electrophoretic medium is removed therefrom; and

a control part for controlling the electrophoretic apparatus including the mechanisms so that they all may operate automatically.

Claim 11 (Cancelled).

Claim 12 (Original): The electrophoretic apparatus according to claim 10, further comprising a specimen sucking mechanism for removing a specimen left in the reservoirs after the specimen is injected into the passages, wherein

the control part controls the specimen sucking mechanism as well so that it may operate automatically.